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IN THE CLAIMS

- 1. (currently amended) A data communication apparatus comprising:
- a transmission side; and
- a reception side that includes:

a spread spectrum processing part that performs a spread spectrum process on an input signal;

an analog-to-digital conversion part that performs an analog to digital conversion process on a signal that has undergone said spread spectrum process that digitally converts the spread spectrum processed signal by sampling the spread spectrum processed signal at a sampling timing in sync with an oscillation timing of the spread spectrum processed signal; and

an inverse spread spectrum processing part that performs an inverse spread spectrum process of said spread spectrum process on a signal that has undergone said analog to digital conversion process the digitally converted signal.

- 2. (currently amended) The data transmission communication apparatus as claimed in claim 1, wherein said spread spectrum process is performed using a predetermined PN sequence.
- 3. (currently amended) The data transmission communication apparatus as claimed in claim 2, wherein a PN sequence number of said PN sequence is set to a value that is adequate for substantial improvement in the precision of said analog-to-digital conversion process so that transmission data contained in the input signal can be detected with predetermined precision.

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- 4. (currently amended) The data transmission communication apparatus as claimed in claim 1, further comprising:
- a gain controlling part that performs a signal gain controlling process on an input signal, wherein

said spread spectrum processing part performs a spread spectrum process on a signal that has undergone said signal gain controlling process.

- 5. (currently amended) A power line carrier communication system comprising:
 a power line functioning as a data transmission path for transmitting data; and
 a data communication apparatus that terminates said power line, said data communication
 apparatus comprising:
 - a transmission side; and
 - a reception side that includes

a spread spectrum processing part that performs a spread spectrum process on an input signal;

an analog-to-digital conversion part that performs an analog-to-digital conversion process on a signal that has undergone said spread spectrum processed signal by sampling the spread spectrum processed signal at a sampling timing in sync with an oscillation timing of the spread spectrum processed signal; and

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an inverse spread spectrum processing part that performs an inverse spread spectrum process of said spread spectrum process on a signal that has undergone said analog to digital conversion process the digitally converted signal.

6. (currently amended) A data reception method comprising:

a spread spectrum processing step of performing a spread spectrum process on an input signal;

an analog-to-digital conversion step of performing an analog-to-digital conversion

process on a signal that has undergone said spread spectrum processed signal the spread spectrum processed signal by sampling the spread spectrum processed signal at a sampling timing in sync with an oscillation timing of the spread spectrum processed signal; and

an inverse spread spectrum processing step of performing an inverse spread spectrum process of said spread spectrum process on a signal that has undergone said analog to digital conversion process the digitally converted signal.

- 7. (previously presented) The data reception method as claimed in claim 8, wherein said spread spectrum process is performed using a predetermined PN sequence in said spread spectrum processing step.
- 8. (currently amended) The data reception method as claimed in claim 7, wherein a PN sequence number of said PN sequence is set to a value that is adequate for substantial

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improvement in the precision of said analog-to-digital conversion process so that transmission data contained in the input signal can be detected with predetermined precision.

9. (previously presented) The data reception method as claimed in claim 6, further comprising:

a gain controlling step of performing a signal gain controlling process on an input signal; wherein

said spread spectrum process of said spread spectrum processing step is performed on a signal that has undergone said signal gain controlling process.